**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1 (Original): A method of manufacturing a semiconductor device, comprising the steps of:

(a) forming a first impurity layer by introducing first impurities which impart a first conductivity type to a semiconductor, into said semiconductor; and

(b) irradiating a coherent light onto said semiconductor under said first impurity layer,

wherein said coherent light has a wavelength at which multi-phonon lattice absorption of said semiconductor occurs.

2 (Original): The method of manufacturing a semiconductor device according to claim 1, wherein said multi-phonon lattice absorption is absorption of two phonons including an optical phonon and an acoustic phonon.

3 (Original): The method of manufacturing a semiconductor device according to claim 2,

wherein each of said optical phonon and said acoustic phonon both of which contribute to said absorption of said two phonons provides a transverse vibration mode.

4 (Original): The method of manufacturing a semiconductor device according to claim

3,

wherein said semiconductor is silicon, and

said wavelength of said coherent light is in a range of 16 to 17 μm.

5 (Original): The method of manufacturing a semiconductor device according to claim 4,

wherein said coherent light is a pulsed laser light including pulses in a range of several femtoseconds to several nanoseconds.

6 (Currently Amended): The method of manufacturing a semiconductor device according to claim ~~2~~ 1,

wherein said step (a) includes forming a second impurity layer by introducing second impurities which impart a second conductivity type different from said first conductivity type to said semiconductor, into said semiconductor, and introducing said first impurities into said second impurity layer to form said first impurity layer.

7 (Previously Presented): A method of manufacturing a semiconductor device, comprising the steps of:

(a) forming an impurity layer by introducing impurities into a surface of a silicon layer having a first conductivity type, said impurities imparting a second conductivity type opposite to said first conductivity type to said silicon layer; and

(b) irradiating a first laser light having a wavelength in a range of 16 to 17 μm onto said silicon layer to induce multi-phonon lattice absorption of said first laser light in said silicon layer.

8 (Previously Presented): A method of manufacturing a semiconductor device, comprising the steps of:

(a) forming an impurity layer by introducing impurities into a surface of a silicon layer having a first conductivity type, said impurities imparting a second conductivity type opposite to said first conductivity type to said silicon layer; and

(b) irradiating a first laser light having a wavelength in a range of 16 to 17 μm onto said silicon layer,

wherein said step (a) includes the steps of:

(a-1) introducing said impurities into said surface of said silicon layer to a first depth; and

(a-2) introducing said impurities into said surface of said silicon layer to a second depth different from said first depth, and

said first laser light is irradiated onto each of said impurities introduced in said steps (a-1) and (a-2) in said step (b).

9 (Original): The method of manufacturing a semiconductor device according to claim 8,

wherein said first laser light is irradiated onto said silicon layer from a face opposite to said surface from which said impurities are introduced in said step (b).

10 (Original): The method of manufacturing a semiconductor device according to claim 9, further comprising the step of:

(c) forming a metal layer used for silicidation on said surface of said silicon layer, between said steps (a) and (b),

wherein said first laser light is irradiated onto said metal layer together with

said silicon layer in said step (b).

11 (Previously Presented): The method of manufacturing a semiconductor device according to claim 8,

wherein said first laser light is incident upon on said silicon layer, and is reflected to be again incident upon said silicon layer in said step (b).

12 (Previously Presented): The method of manufacturing a semiconductor device according to claim 8,

wherein said silicon layer is mounted on a holder which scatters said first laser light in said step (b).

13 (Previously Presented): The method of manufacturing a semiconductor device according to claim 8,

wherein said silicon layer is mounted on a holder which absorbs said first laser light in said step (b).

14 (Previously Presented): The method of manufacturing a semiconductor device according to claim 8,

wherein a second laser light for heating, together with said first laser light, is irradiated onto said silicon layer in said step (b).

15 (Original): The method of manufacturing a semiconductor device according to claim 14,

wherein said second laser light is irradiated onto said silicon layer from a face opposite

to said surface of said silicon layer from which said impurities are introduced, and said first laser light is irradiated onto said silicon layer from said surface of said silicon layer from which said impurities are introduced.

16 (Previously Presented): The method of manufacturing a semiconductor device according to claim 8,

wherein said steps (a) and (b) are carried out in parallel with each other.

17 (Previously Presented): The method of manufacturing a semiconductor device according to claim 8,

wherein said first laser light is irradiated onto said silicon layer from a face opposite to said surface from which said impurities are introduced.

18 (Previously Presented): The method of manufacturing a semiconductor device according to Claim 1,

wherein said semiconductor is silicon.

19 (Previously Presented): The method of manufacturing a semiconductor device according to Claim 1,

wherein said multi-phonon lattice absorption of said semiconductor occurs from interaction of said coherent light and a plurality of phonons having different modes.